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Attorney Docket No.: F-100

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:) Attorney Docket No.: F-100
) Customer No. 919
Robert A. Cordery, et al.)
)
Serial No.: 09/654,951) Examiner: Mary Da Zhi Wang
Filed: September 5, 2000) Group Art Unit: 3621
Confirmation No.: 7627)
) Date: March 21, 2005

Title: A METHOD FOR AUDITING A DATABASE AND SYSTEM FOR
 CARRYING OUT SUCH METHOD

Mail Stop Appeal Brief- Patents
Commissioner for Patents
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Alexandria, Virginia 22313-1450

APPELLANT'S BRIEF ON APPEAL

Sir:

This is an appeal pursuant to 35 U.S.C. § 134 and 37 C.F.R. §§ 1.191 et seq. from the final rejection of claims 1-32 of the above-identified application mailed September 22, 2004. This Brief is in furtherance of the Notice of Appeal filed in this case on December 21, 2004. This Brief is transmitted in triplicate. A petition for a one-month extension of time to respond is filed herewith. Accordingly, this brief is timely filed. Pursuant to MPEP 1208.02, no fee is believed due because the fee for a Notice of Appeal and for the filing of an Appeal Brief were previously paid in this application. The Commissioner is hereby authorized to charge any additional fees that may be required for this appeal or to make this brief timely or credit any overpayment to Deposit Account No. 16-1885. Enclosed with this original are two copies of this brief.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, on March 21, 2005 (Date of Transmission).
George M. Macdonald, Reg. No. 39,284 (Name of Registered Rep.)

(Signature)

March 21, 2005 (Date)

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I. Real Party in Interest

The real party in interest in this appeal is Pitney Bowes Inc., a Delaware corporation, the assignee of this application.

II. Related Appeals and Interferences

There are no appeals or interferences known to Appellants, their legal representative, or the assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims

Claims 1-6, 8-20 and 22-32 are in the case and under final rejection of the Examiner rejected under 35 U.S.C. § 103(a) as allegedly being rendered obvious by U.S. Patent No. 5,367,464 to Abumehdi, et al. ("Abumehdi '464") in view of U.S. Patent No. 6,061,668 to Sharow ("Sharow '668").

Claims 7 and 21 are in the case and under final rejection of the Examiner rejected under 35 U.S.C. § 103(a) as allegedly being rendered obvious by U.S. Patent No. 5,367,464 to Abumehdi, et al. ("Abumehdi '464") in view of U.S. Patent No. No. 6,061,668 to Sharow ("Sharow '668") and further in view of U.S. Patent No. 5,778,076 to Kara, et al. ("Kara '076").

Appellants hereby appeal the rejection of claims 1-32.

IV. Status of Amendments

There are no amendments to the claims filed subsequently to the final rejection of September 22, 2004. Therefore, the claims set forth in Appendix A to this brief are those as set forth before the final rejection.

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V. Summary of Claimed Subject Matter

Appellants' invention relates to methods and systems for providing security for a database by generating and maintaining audit data that is used to audit and verify the database. Figure 1 is reproduced below for use in a summary discussion of an illustrative embodiment.

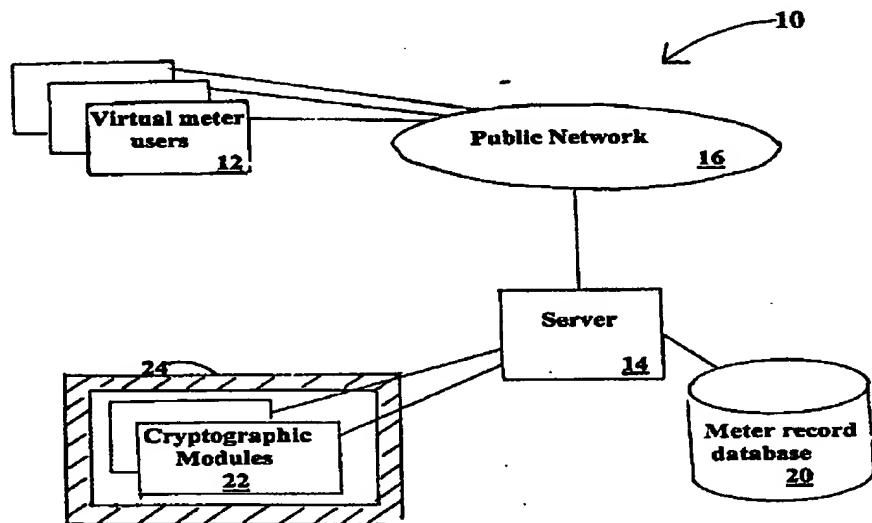


FIG. 1

Each user 12 is provided access to a particular meter record in the meter record database 20 using one of a plurality of cryptographic modules 22 to process the postage transaction. Any available cryptographic module is used each time the customer requests postage and the modules may operate independently due to the audit systems described. Audit data is updated and stored in each module 22 and can be compared to audit data stored in the server 20. (Specification at page 3, line 27-page 4, line 10; page 5, lines 20-23, page 6, lines 1-26.)

Additional features of the invention are discussed below in the Argument section of this Brief. This summary is not intended to supplant the description of the claimed

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subject matter as provided in the claims as recited in Appendix A, as understood in light of the entire specification.

VI. Grounds of rejection to Be Reviewed on Appeal

Whether claims 1-32 are patentable under 35 U.S.C. §103(a).

VII. Argument

This is now the second Appeal Brief submitted in the instant application as the Appeal Brief filed on January 14, 2004 was rendered moot when the Examiner withdrew the finality of the then final rejection and reopened prosecution.

As Appellants discuss in detail below, the final rejection of several of claims 1-32 is unsupported by the references cited. It is respectfully submitted that the rejection does not even meet the threshold burden of presenting a *prima facie* case of unpatentability. For this reason alone, Appellants are entitled to grant of a patent. In re Oetiker, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

A. The Abumehdi '464 and Sharow '668 References are Not Properly Combined Under 35 U.S.C. Section 103(a)

The Sharow '668 reference is not properly combined with the Abumehdi '464 reference. The Sharow '668 reference does not appreciate a problem of a plurality of modules maintaining transaction audit data that is also reflected in a separate database such that the audit data from the two locations can be compared. As shown below, Sharow does not even teach or fairly suggest any audit of data and there is absolutely no suggestion or motivation to combine the references.

In the September 22, 2004 Final Rejection, the Examiner attempts to support the combination of the references by stating that:

[I]n this case, Abumehdi teaches a central terminal maintains transactions data from plurality of modules. Final Rejection at page 2.

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Appellants argued that it is clear from Abumehdi '464 at Col. 1, lines 10-48 and Col. 3, lines 3-65 that only one module could access the credit update amount record. Such update record has a one-to-one correspondence with the one franking meter. Accordingly, Abumehdi '464 specifically teaches away from allowing access to that particular record using more than one module. One of ordinary skill in the art would be led in a direction divergent from that taught in the invention as presently claimed after having read Abumehdi '464. Accordingly, the references are not properly combined and the rejection should be reversed. See *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F. 3d 877 (Fed. Cir. 1998).

In response to Appellants argument that there is no motivation to combine the references, the Examiner, in the Final Rejection at pages 2-3 acknowledged the requirement of some teaching, suggestion or motivation to combine the references found in the references themselves or the general knowledge of one of skill in the art. Citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1998) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). However, the Examiner then proceeded to attempt to support the combination of the references by stating that:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the features [allegedly found in Sharrow '668] of summing the audit data of each of said modules to generate the system audit data, and verifying the database's integrity against the system audit data in Aubumehdi's teaching because it would increase the overall consistency of the modules. Final Rejection at pages 4-5.

As the Federal Circuit has held, "[I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art ..." See *In re Fitch*, 972 F.2d 1260, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992)(quoting *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1998)). The cited prior art does not provide even a hint of a problem of auditing database records that may be modified by any of a plurality of input modules. As previously admitted by the Examiner in the earlier July 14, 2003 Final Office Action, Abumehdi '464 discusses only one input module to access a record. As described below, the cited prior art does not even show a plurality of input modules and Sharrow '668 does not even contemplate an audit of a database record. The

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Examiner cited to the following passages of Sharrow '668 to allegedly teach summing audit data:

The central management computer checks for an acknowledgment for each transmission sent, and sends an acknowledgment for every data transmission correctly received. In the event an acknowledgment is not received, the transmission is repeated a preset number of times, after which a maintenance report is generated, so that an inoperative appliance or machine, or network fault, is repaired promptly. Sharrow '668 col. 3, lines 24-30.

When the users make a selection, the appliance or machine controller communicates this data to the central management computer 10 via the network. The central management computer 10 checks its database for the price to be charged for the appliance or machine cycle selected by the users, and sends a message to the users informing them that their account will be billed the stated amount for the selected use, and asking that they choose to proceed or to cancel. Sharrow '668 col. 5, lines 46-54.

The request is transmitted from appliance 14, via the network cable 11, to the central management computer 10. The central management computer 10 sends a request for account verification 620, via PMS data cable 18, to the property management system 19. Sharrow '668 col. 7, lines 20-24.

However, as shown from the following passages that were not cited, the account verification is to determine if the user is authorized to process the transaction.

The property management system 19 checks its data base 618 to see if a guest is registered in room #103, and if the registered guest has authorized charges for use of the clothes washer.

The property management system 19 replies, via PMS data cable 18, to the central management computer 10, in the affirmative or negative, depending on the information retrieved from its database.

If the central management computer 10 received a negative response from the property management system 19, a message is sent 622, via the network cable 11, to appliance 14, which is presented on the display readout of appliance 14, notifying that the user that the account for room #103 is not valid or use of the clothes washer has not been authorized, and that the user should contact the front desk at extension #808 for assistance. The controller is then reset 616, in preparation for the next user selection.

If the central management computer 10 received an affirmative response from the property management system 19, a message is sent 624, via the network cable 11, to appliance 14, instructing the user to select the desired wash cycle.

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Appliance 14, via network cable 11, sends a request 626 to central management computer 10, indicating the wash cycle that the user has selected. Sharrow '668 col. 7, lines 25-49.

Appellants respectfully submit that Sharrow does not contemplate or fairly suggest any type of record auditing and that the Examiner's alleged reason for such combination in providing greater data consistency cannot be supported. For example, in a portion of Sharrow '668 that is not cited by the Examiner, Sharrow describes:

If they elect to proceed, the central management computer 10 opens a transaction file that records the unique identification code of the appliance or machine, the cycle selected by the user, the price quoted, and the date and time the election to proceed was made, then the central management computer 10 sends an instruction to the specific appliance or machine, enabling it to run the cycle or mode selected by the user. Sharrow '668 col. 5, lines 58-65.

Nowhere does Sharrow '668 teach or fairly suggest audit data at all or even auditing records at all. There is absolutely no motivation to combine the reference for such a purpose. Nowhere in Sharrow '668 is there a discussion of verifying that database record using separate audit data. The Examiner states:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the features [allegedly found in Sharrow '668] of summing the audit data of each of said modules to generate the system audit data, and verifying the database's integrity against the system audit data in Aubumehdi's teaching because it would increase the overall consistency of the modules. Final Rejection at pages 4-5, bracketed comment added for clarity.

However, Sharrow does not appreciate the need for any audit of data as shown from the citation above. Sharrow teaches no audit and exactly contrary to the Examiner's assertion, Sharrow could not possibly "increase overall consistency of the modules" and more importantly as Sharrow '668 does not contemplate any type of audit, it could not even determine if there was an inconsistency in the data record.

The Examiner shows no reference or knowledge to support even an appreciation of a problem of auditing records that may be modified by any of a plurality of input

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modules. See also *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F. 3d 877 (Fed. Cir. 1998).

Appellants have also argued that the references were not properly combined as non-analogous art. The invention as presently claimed relates to auditing and verifying the integrity of database records that may be alternatively modified by a plurality of independent modules. An illustrative embodiment is a virtual postage meter system having a plurality of cryptographic modules that may alternatively be used to modify a single virtual postage meter postage value record for a particular customer. While Abumehdi '464 is a reference in the postage meter art, Sharow '668 is directed to pay-per-use appliances. The rejections should be reversed because the references are not in an art analogous to that of the invention as presently claimed. See *Wang Lab., Inc. v. Toshiba Corp.*, 993 F. 2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993).

Accordingly, the references are not properly combined for at least the reasons stated above and the rejection should be reversed.

B. Claims 1-6, 8-20 and 22-32 are not Unpatentable under 35 U.S.C. § 103(a)

Claims 1-6, 8-20 and 22-32 are in the case and under final rejection of the Examiner rejected under 35 U.S.C. § 103(a) as allegedly being rendered obvious by U.S. Patent No. 5,367,464 to Abumehdi, et al. ("Abumehdi '464") in view of U.S. Patent No. 6,061,668 to Sharow ("Sharow '668").

In rejecting a claim under 35 U.S.C. §103, the Examiner is charged with the initial burden for providing a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 375 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. *In re Ochiai*, 37 USPQ2d 1127 (Fed. Cir. 1995); *In re Deuel*, 51 F.3d 1552, 34 USPQ 1210 (Fed. Cir. 1995); *In re Fritch*, 972 F.2d 1260, 23 USPQ 1780 (Fed. Cir. 1992); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d

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1044, 5 USPQ2d 1434 (Fed. Cir. 1988). In establishing the requisite motivation, it has been consistently held that both the suggestion and reasonable expectation of success must stem from the prior art itself, as a whole. *In re Ochiai*, supra; *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

In the September 22, 2004 Final Office Action, the Examiner rejected claims 1-6, 8-20 and 22-32 under 35 U.S.C. section 103(a).

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated below.

Claim 1 is directed to a method for auditing a database having a plurality of records wherein each record is accessible through at least one of a plurality of independent modules and is shown below:

1. A method for auditing a database comprising a plurality of records, said records each being accessible through at least one of a plurality of independent modules, said method comprising the steps of:
 - a) maintaining a set of additive audit data in each of said modules;
 - b) controlling said modules so that each module increments a set of audit data maintained in said module when a record is accessed through said module;
 - c) summing said sets of audit data to generate system audit data; and
 - d) verifying said database's integrity against said system audit data. (emphasis added).

The Examiner cites to Abumehdi '464 that teaches a single postage meter record system that necessarily includes an audit mechanism that is required of every current stand-alone postage meter. The U.S. postal system requires that postage meters use prepaid postage that is stored in a postage meter. A typical postage meter includes an ascending register that stores a running total of all postage dispensed by the meter and a descending register that stores the remaining amount of postage credited to the meter. Typically, a postage meter also includes a control sum register that provides a

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PAGE 12/25 * RCVD AT 3/21/2005 5:04:34 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/7 * DNIS:8729306 * CSID:203 924 3919 * DURATION (mm:ss):10:44

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check upon the descending and ascending registers and that stores a running account of the total funds being added into the meter. Such a control sum register must always correspond with the summed readings of the ascending and descending registers.

The Examiner ignores the elements relating to a plurality of input modules, each having a set of audit data that may all be summed to calculate a system audit data. The Examiner previously stated that:

Abumehdi does not specifically teach said records being access [sic] through a plurality of modules. (emphasis in original) (12/27/02 Office Action, section 3).

The Examiner now asserts that "a plurality of independent modules" corresponds to the plurality of franking machines 101-10n as shown in Fig. 1 of Abumehdi. Final Rejection at page 4.

Yet, the cited references do not even suggest a plurality of input modules, let alone appreciate a problem of auditing records. There is absolutely no suggestion or motivation for plurality of database records wherein the records are each accessible through at least one of a plurality of independent modules. There is absolutely no suggestion for aggregating audit data amongst the plurality of input modules to obtain a system audit data.

Accordingly, the Examiner has failed to establish a *prima facie* case for an obviousness rejection.

As discussed above, the references are not properly combined. Furthermore, even if the references were to be found to be properly combined, the references do not teach or fairly suggest the invention as presently claimed and in particular do not teach or suggest a plurality of database records wherein the records are each accessible through at least one of a plurality of independent modules. Additionally, the references do not teach or fairly suggest summing said sets of audit data. Further still, the references do not teach or fairly suggest a system in which each module maintains a set of audit data and in which each module increments a set of audit data. Furthermore, the Sharrow '668 reference does not teach or fairly suggest summing said sets of audit data to generate system audit data; and verifying said database's integrity against said system audit data.

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Additionally, other claimed elements are not taught or suggested by the cited references. Independent claim 15 includes similar elements and is patentable over the cited references for at least the same reasons. The referenced dependent claims are patentable over the cited references for at least the reasons discussed above regarding the respective independent claims. For at least the above stated reasons, Appellants respectfully submit that the final rejection as to claims 1-3, 5, 9-12, 15-18, 20 and 22-26 is in error and should be reversed.

Regarding claims 2, 9, 16 and 24, claim 2 recites:

2. A method as described in claim 1 comprising the further steps of:
 - a) sending a user request for access to a record and said requested record to a selected one of said modules; and
 - b) said selected module updating said requested record in accordance with said request .

There is absolutely no teaching or suggestion in Abumehdi of sending a user request to a module. At best, the resetting terminal receives postage refill requests from one or more franking machines 10. Abumehdi '464 does not teach or fairly suggest "sending a user request for access to a record and said requested record to a selected one of said modules" since the one meter of Abumehdi '464 must be used for the transaction and there need be no selection. Accordingly, the Examiner has failed to establish a *prima facie case* for an obviousness rejection.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 2, 9, 16 and 24 are in error and should be reversed.

Regarding the rejection of claims 4, 10 and 20, Claim 4 depends indirectly from claim 1 and is patentable for at least the reasons as described above with reference to claim 1.

Furthermore, claim 4 recites:

4. A method as described in claim 3 wherein said request includes a request for a digital postal indicium and comprises the further steps of:

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- a) controlling said selected module to generate and return to said requesting user a digital postal indicium in accordance with said request; and
- b) controlling said selected module to update said requested record in accordance with said request.
(emphasis added).

The Examiner has not shown a reference or properly combined references teaching or suggesting at least the element emphasized above. The examiner cites solely to the operation of a stand alone postage meter in generating a postage indicia without considering the other limitation of the claims. Abumehdi '464 does not teach or fairly suggest a "selected module" since the one meter of Abumehdi '464 must be used for the transaction and there need be no selection.

Accordingly, the Examiner has failed to establish a prima facie case for an obviousness rejection.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 4, 10 and 20 are in error and should be reversed.

Regarding the rejection of claims 6 and 19, Claim 6 depends indirectly from claim 1 and is patentable for at least the reasons as described above with reference to claim 1.

Furthermore, claim 6 recites:

- 6. A method as described in claim 2 wherein said selected module incorporates time information in said audit data.

The Examiner has not shown a reference or properly combined references teaching or suggesting at least the element emphasized above. Sharow '668 stores time data in its transaction data, but does not process audit data.

Accordingly, the Examiner has failed to establish a prima facie case for an obviousness rejection.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 6 and 19 are in error and should be reversed.

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Regarding the rejection of claims 8 and 22, Claim 8 depends directly from claim 1 and is patentable for at least the reasons as described above with reference to claim 1.

Furthermore, claim 8 recites:

8. A method as described in claim 1 wherein said sets of audit data comprise increments of a linear error correcting code for correcting a field of said records, whereby said audit data can be summed to generate a system error correcting code to correct said field of said records. (emphasis added).

The Examiner has not shown a reference or properly combined references teaching or suggesting at least the element emphasized above. Abumehdi '464 does not teach or fairly suggest a "linear error correcting code" since the one meter of Abumehdi '464 merely checks multiple registers. Accordingly, the Examiner has failed to establish a prima facie case for an obviousness rejection.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 8 and 22 are in error and should be reversed.

Regarding claims 13, 14, 27 and 28, Claim 13 depends indirectly from claim 1 and claim 14 is directly dependent from claim 13. Claim 27 depends indirectly from claim 15 and includes elements similar to those of claim 13. Claim 28 depends from claim 27. These claims are patentable for at least the reasons as described above with reference to claims 1 and 15. Additionally, they are patentable over the cited reference for the following reason.

Claim 13 recites:

13. A method as described in claim 8 wherein said sets of audit data further comprise arithmetic totals for values stored in said field of said records, whereby arithmetic sums of said values across said modules can be compared with arithmetic sums across said records, whereby numbers of errors greater than the number which can be detected by said system error correcting code can be detected. (emphasis added).

The Examiner has not provided any reference or combination of reference teaching or fairly suggesting the element emphasized above. Abumehdi '464 does not

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teach or fairly suggest arithmetic sums of said values across said modules or an error correcting code since the one meter of Abumehdi '464 merely checks multiple registers.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 13, 14, 27 and 28 is in error and should be reversed.

Regarding the rejection of claims 29-32, Claim 29 recites:

29. A method for auditing a database comprising a plurality of records, said records each being accessible through at least two of a plurality of independent modules, said method comprising:

maintaining a set of additive audit data in each of said modules;

controlling said modules so that each module increments a set of audit data maintained in said module when a record is accessed through said module;

summing said sets of audit data to generate system audit data; and

verifying said database's integrity against said system audit data. (emphasis added).

The Examiner has not shown a reference or properly combined references teaching or suggesting at least the element emphasized above.

Accordingly, the Examiner has failed to establish a prima facie case for an obviousness rejection.

Furthermore, claim 30 recites:

30. A method according to claim 29 further comprising:

controlling said modules so that each module sends a copy of audit data maintained in said module to a server after a record is accessed through said module.

The cited references do not teach sending a copy of the audit data to the server after a record is accessed.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 29-32 are in error and should be reversed.

C. Claims 7 and 21 Are Not Unpatentable Under 35 U.S.C. section 103(a)

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Claims 7 and 21 are in the case and under final rejection of the Examiner rejected under 35 U.S.C. § 103(a) as allegedly being rendered obvious by U.S. Patent No. 5,367,464 to Abumehdi, et al. ("Abumehdi '464") in view of U.S. Patent No. 6,061,668 to Sharrows ("Sharrows '668") and further in view of U.S. Patent No. 5,778,076 to Kara, et al. ("Kara '076").

The claims discussed in this section depend directly or indirectly from claims 1 and 15 respectively and are patentable over the cited references for at least the reasons described above with reference to claims 1 and 15 and the improper combination of references.

For example, claim 21 recites:

21. A system as described in claim 15 wherein each of said modules is physically secured against tampering.

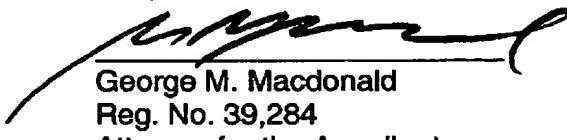
Sharrows '668 does not appreciate any security risk and there is absolutely no motivation to combine Kara '076 with Sharrows '668.

For at least these reasons, Appellants respectfully submit that the final rejection as to claims 7 and 21 is in error and should be reversed.

IX. Conclusion

In Conclusion, Appellants respectfully submit that the final rejection of claims 1-32 is in error for at least the reasons given above and should, therefore, be reversed.

Respectfully submitted,



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VIII – CLAIMS APPENDIX
APPENDIX A

1. A method for auditing a database comprising a plurality of records, said records each being accessible through at least one of a plurality of independent modules, said method comprising the steps of:

- a) maintaining a set of additive audit data in each of said modules;
- b) controlling said modules so that each module increments a set of audit data maintained in said module when a record is accessed through said module;
- c) summing said sets of audit data to generate system audit data; and
- d) verifying said database's integrity against said system audit data.

2. A method as described in claim 1 comprising the further steps of:

- a) sending a user request for access to a record and said requested record to a selected one of said modules; and
- b) said selected module updating said requested record in accordance with said request .

3. A method as described in claim 2 wherein said selected module incorporates cryptographically processed information in said record to prevent generation of fraudulent records.

4. A method as described in claim 3 wherein said request includes a request for a digital postal indicium and comprises the further steps of:

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- a) controlling said selected module to generate and return to said requesting user a digital postal indicium in accordance with said request; and
- b) controlling said selected module to update said requested record in accordance with said request.

5. A method as described in claim 2 wherein said selected module incorporates encrypted information in said audit data to authenticate said audit data.

6. A method as described in claim 2 wherein said selected module incorporates time information in said audit data.

7. A method as described in claim 1 comprising the further step of providing security against tampering for each of said modules.

8. A method as described in claim 1 wherein said sets of audit data comprise increments of a linear error correcting code for correcting a field of said records, whereby said audit data can be summed to generate a system error correcting code to correct said field of said records.

9. A method as described in claim 8 comprising the further steps of:
a) sending a user request for access to a record and said requested record to a selected one of said modules; and

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b) said selected module updating said requested record in accordance with said request.

10. A method as described in claim 9 wherein said request includes a request for a digital postal indicium and comprising the further steps of:

a) controlling said selected module to generate and return to said requesting user a digital postal indicium in accordance with said request; and
b) controlling said selected module to update said requested record in accordance with said request.

11. A method as described in claim 10 wherein said corrected field contains a total postage amount for the corresponding record.

12. A method as described in claim 10 wherein said corrected field contains a total number of indica dispensed for the corresponding record.

13. A method as described in claim 8 wherein said sets of audit data further comprise arithmetic totals for values stored in said field of said records, whereby arithmetic sums of said values across said modules can be compared with arithmetic sums across said records, whereby numbers of errors greater than the number which can be detected by said system error correcting code can be detected.

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14. A method as described in claim 13 wherein said field contains a total postage amount or a total number of indica dispensed.

15. A database system comprising:

- a) a data store storing a database comprising a plurality of records;
- b) a server maintaining said records;
- c) a plurality of independent modules providing access to said records; wherein
- d) said modules are programmed to maintain a set of additive audit data in each of said modules and increment a set of audit data maintained in one of said modules when a record is accessed through said one module;
- e) said server is programmed to sum said sets of audit data to generate system audit data and verify said database's integrity against said system audit data.

16. A system as described in claim 15 wherein:

- a) said server is further programmed to receive user requests for access and send said user request and said requested record to a selected one of said modules; and
- b) said modules are further programmed so that said selected module updates said requested record in accordance with said request .

17. A system as described in claim 16 wherein said modules are further programmed so that said selected module incorporates encrypted information in said record to prevent generation of fraudulent records.

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18. A system as described in claim 16 wherein said selected module incorporates encrypted information in said audit data to authenticate said audit data.

19. A system as described in claim 16 wherein said selected module incorporates time information in said audit data.

20. A system as described in claim 17 wherein said request includes a request for a digital postal indicium and wherein said modules are further programmed so that said selected module generates and returns to said requesting user a digital postal indicium in accordance with said request; and updates said requested record in accordance with said request.

21. A system as described in claim 15 wherein each of said modules is physically secured against tampering.

22. A system as described in claim 15 wherein said sets of audit data comprise increments of a linear error correcting code for correcting a field of said records, whereby said audit data can be summed by said server to generate a system error correcting code to correct said field of said records.

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23. A system as described in claim 22 wherein said modules are further programmed so that said selected module incorporates encrypted information in said record to prevent generation of fraudulent records.

24. A system as described in claim 23 wherein said request includes a request for a digital postal indicium and wherein said modules are further programmed so that said selected module generates and returns to said requesting user a digital postal indicium in accordance with said request; and updates said requested record in accordance with said request.

25. A system as described in claim 24 wherein said corrected field contains a total postage amount for the corresponding record.

26. A system as described in claim 24 wherein said corrected field contains a total number of indicia dispensed for the corresponding record.

27. A system as described in claim 22 wherein said sets of audit data further comprise arithmetic totals for values stored in said field of said records, whereby arithmetic sums of said values across said modules can be compared with arithmetic sums across said records, whereby numbers of errors greater than the number which can be detected by said system error correcting code can be detected.

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28. A system as described in claim 27 wherein said field contains a total postage amount or a total number of indicia dispensed.

29. A method for auditing a database comprising a plurality of records, said records each being accessible through at least two of a plurality of independent modules, said method comprising:

maintaining a set of additive audit data in each of said modules;

controlling said modules so that each module increments a set of audit data maintained in said module when a record is accessed through said module;

summing said sets of audit data to generate system audit data; and

verifying said database's integrity against said system audit data.

30. A method according to claim 29 further comprising:

controlling said modules so that each module sends a copy of audit data maintained in said module to a server after a record is accessed through said module.

31. A method according to claim 30 wherein:

summing said sets of audit data utilizes at least one set of the copy audit data maintained on the server.

32. A method according to claim 29 further comprising:

controlling said modules so that each module updates an error correcting code after a record is accessed through said module.